CLAIMS:

1. A device (1) for processing a signal (S), which device (1) has an antenna configuration (5), which antenna configuration (5) is arranged to transmit a signal (S), the antenna configuration (5) having at least one antenna-configuration terminal (6, 7) that is intended for connecting the antenna configuration (5) to a circuit (2) and the antenna configuration (5) having an antenna-configuration impedance (ZA) at the antenna-configuration terminal (6, 7), and which device (1) has the circuit (2), which circuit (2) has at least one circuit terminal (3, 4) at which the circuit (2) has a circuit impedance (ZS) and at which the circuit (2) is connected to the antenna-configuration terminal (6, 7) for the purpose of power transmission between the antenna configuration (5) and the circuit (2) by using the signal (S), wherein at least one of the two impedances (ZA, ZS) has, in respect of its reactance (YA, YS), a difference in reactance value (ΔY) from a nominal reactance value (Y_{NOM}) that is adapted for the transmission of power between the antenna configuration (5) and the circuit (2), characterized in that one of the two impedances (ZA, ZS) has a resistance (XA, XS) whose value is greater than a nominal resistance value (X_{NOM}) that is adapted from the transmission of power between the antenna configuration (5) and the circuit (2) and is smaller than a maximum resistance value (X_{MAX}) that is a function of the difference in the reactance value (ΔY).

2. A device (1) as claimed in claim 1, characterized in that the functional dependence that the maximum resistance value (X_{MAX}) shows on the difference in reactance value (ΔY) is given by the formula:

$$X_{MAX}(\Delta Y) = \frac{\Delta Y^2}{X_{NOM}} + X_{NOM}$$

where ΔY is the difference in reactance value and X_{NOM} is the nominal resistance value.

3. A device (1) as claimed in claim 1, characterized in that the resistance (XA, XS) whose resistance value is greater than the nominal resistance value (X_{NOM}) that is adapted for the transmission of power between the antenna configuration (5) and the

circuit (2) and is smaller than the maximum resistance value (X_{MAX}) that is a function of the difference in reactance value (ΔY), is an optimum resistance value (X_{OPT}) given by the formula:

$$X_{OPT}(\Delta Y) = \sqrt{X_{NOM}^2 + \Delta Y^2}$$

where ΔY is the difference in reactance value and X_{NOM} is the nominal resistance value.

4. A device (1) as claimed in claim 1, characterized in that the quality (Q) of the two impedances (ZA, ZS) has a value that is greater than two.

5. A device (1) as claimed in claim 1, characterized in that the antenna-configuration impedance (ZA) has a resistance (XA) whose value is greater than the nominal resistance value (X_{NOM}) that is adapted for the transmission of power between the antenna configuration (5) and the circuit (2) and is smaller than the maximum resistance value (X_{MAX}) that is a function of the difference in reactance value (ΔY).

6. An antenna configuration (5) for a device (1) for processing a signal (S), which antenna configuration (5) is arranged to transmit a signal (S) and which antenna configuration (5) has at least one antenna-configuration terminal (6, 7) that is intended for connection to a circuit (2) of the device (1), the circuit (2) having at least one circuit terminal (3, 4) at which the circuit (2) has a circuit impedance (ZS) and at which the circuit (2) is connectable to the antenna-configuration terminal (6, 7) for the purpose of power transmission between the antenna configuration (5) and the circuit (2) by using the signal (S), and which antenna configuration (5) has an antenna-configuration impedance (ZA) at the antenna-configuration terminal (6, 7), wherein at least one of the two impedances (ZA, ZS) has, in respect of its reactance (YA, YS), a difference in reactance value (ΔY) from a nominal reactance value (X_{NOM}) that is adapted for the transmission of power between the antenna configuration (5) and the circuit (2), characterized in that the impedance (ZA) of the antenna configuration has a resistance (XA) whose value is greater than a nominal resistance value (X_{NOM}) that is adapted from the transmission of power between the antenna configuration (5) and the circuit (2) and is smaller than a maximum value (X_{MAX}) that is a function of the difference in reactance value (ΔY).

7. An antenna configuration (5) as claimed in claim 6, characterized in that the functional dependence that the maximum resistance value (X_{MAX}) shows on the difference in reactance value (ΔY) is given by the formula:

$$X_{MAX}(\Delta Y) = \frac{\Delta Y^2}{X_{NOM}} + X_{NOM}$$

where ΔY is the difference in reactance value and X_{NOM} is the nominal resistance value.

8. An antenna configuration (5) as claimed in claim 6, characterized in that the resistance (XA) whose resistance value is greater than the nominal resistance value (X_{NOM}) that is adapted for the transmission of power between the antenna configuration (5) and the circuit (2) and is smaller than the maximum resistance value (X_{MAX}) that is a function of the difference in reactance value (ΔY), is an optimum resistance value (X_{OPT}) given by the formula:

$$X_{OPT}(\Delta Y) = \sqrt{X_{NOM}^2 + \Delta Y^2}$$

where ΔY is the difference in reactance value and X_{NOM} is the nominal resistance value.

9. An antenna configuration (5) as claimed in claim 6, characterized in that the quality (Q) of the antenna-configuration impedance (ZA) has a value that is greater than two.

10. A circuit (2) for a device (1) for processing a signal (S), which circuit (2) has at least one circuit terminal (3, 4) at which the circuit (2) has a circuit impedance (ZS) and at which the circuit is connectable to an antenna-configuration terminal (6, 7) for the purpose of power transmission between an antenna configuration (5) and the circuit (2) by using the signal (S), which antenna configuration (5) is arranged for the transmission of the signal (S), which antenna configuration has at least one antenna-configuration terminal (6, 7) that is intended for connecting the antenna configuration (5) to the circuit (2), and which antenna configuration has an antenna-configuration impedance (ZA) at the antenna-configuration terminal (6, 7), wherein at least one of the two impedances (ZA, ZS) has, in respect of its reactance (YA, YS), a difference in reactance value (ΔY) from a nominal reactance value (Y_{NOM}) that is adapted for the transmission of power between the antenna configuration (5) and the circuit (2), characterized in that the impedance (ZS) of the circuit

has a resistance (XS) whose value is greater than a nominal resistance value (X_{NOM}) that is adapted from the transmission of power between the antenna configuration (5) and the circuit (2) and is smaller than a maximum resistance value (X_{MAX}) that is a function of the difference in the reactance value (ΔY).

11. A circuit (2) as claimed in claim 10, characterized in that the functional dependence that the maximum resistance value (X_{MAX}) shows on the difference in reactance value (ΔY) is given by the formula:

$$X_{MAX}(\Delta Y) = \frac{\Delta Y^2}{X_{NOM}} + X_{NOM}$$

where ΔY is the difference in reactance value and X_{NOM} is the nominal resistance value.

12. A circuit (2) as claimed in claim 10, characterized in that the resistance (XS) whose resistance value is greater than the nominal resistance value (X_{NOM}) that is adapted for the transmission of power between the antenna configuration (5) and the circuit (2) and is smaller than the maximum resistance value (X_{MAX}) that is a function of the difference in reactance value (ΔY), is an optimum resistance value (X_{OPT}) given by the formula:

$$X_{OPT}(\Delta Y) = \sqrt{X_{NOM}^2 + \Delta Y^2}$$

where ΔY is the difference in reactance value and X_{NOM} is the nominal resistance value.

13. A circuit (2) as claimed in claim 10, characterized in that the quality (Q) of the circuit impedance (ZS) has a value that is greater than two.